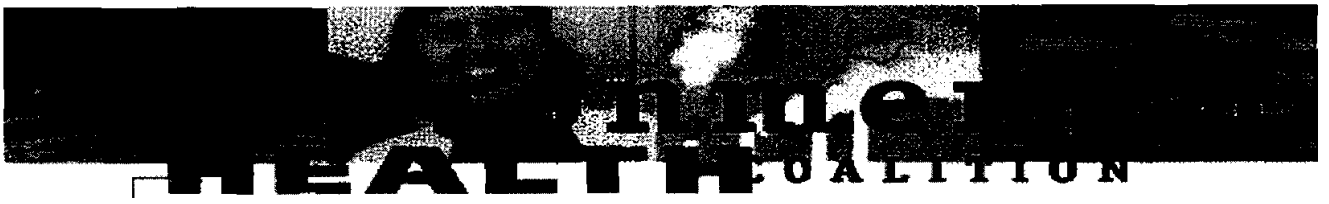

Environmental Health Coalition Discussion Paper
Prepared for the Joint Meeting of the City of Chula Vista and Port District,
January 18, 2007

Our region is at an energy crossroads. Several important actions are under debate and slated for decision in the next year. Depending on how the decisions turn, the impacts on our future, for better or worse, will be significant. Environmental Health Coalition (EHC) is very concerned about the impacts of these decisions on our environmental health. The current proposal for a large combination baseload/peaker plant on the Bayfront will cause unacceptable pollution on western Chula Vista and will continue a long history of environmental injustice for this heavily impacted community. Construction of an unnecessary, multi-billion dollar transmission line promises to be nothing more than a line of exploitation to under-regulated power plants south of the Border or to dirty power in other states. It is vociferously opposed by local elected officials in Imperial County.

Fortunately, these are not our only options.

Our challenge locally is that many of the agencies with decision-making authority are state agencies and view projects through a narrow, issue-specific lens. They are not accountable to local residents who will have to live with the impacts of their decisions. The energy utilities are large corporate entities that have a legal obligation to serve the interest of their stockholders and, so, will not be looking out for local residents' interests. It is now undisputed that the global climate crisis is real and as a coastal region with limited water supplies our local decisions also have broader implications.

However, what is very clear in this debate is that we, local governments and community, have to look out for our own interests. Whether it is our desire to protect and improve our air quality, maintain local influence over energy generation, control rates, protect our diminishing natural habitats, maximize efficiency, energy security, or promote in-basin clean renewable energy, it is up to us to ensure that the decisions that are made are right for the people of this region.

As it looks now, the only significant near-term decision to be made by a local agency is the Port District's decision whether or not to enter into a 45-year lease for a new, large power plant on the Chula Vista Bayfront. The only constraints on energy development may be whatever conditions the Port places on a new leaseholder. EHC holds that any decision of this magnitude must be made with adequate information and carefully given how long we all must live with the results of such a decision.

How should the South Bay make this decision?

We all seek safe, clean, reliable, and sufficient energy to meet the needs of a growing region. The question is how best to achieve this. We see four critical questions before us:

- What is our future need/energy gap?
- What are the options for meeting (or reducing) the need?
- What is the best option?
- How can we implement the best option?

It is critical that South Bay leadership evaluate the evidence available in terms of its impacts on South Bay and to forge a unified position on these questions. We believe that this is necessary to avoid the concentration of power infrastructure in the South Bay which was attempted after the crises caused by gross energy market manipulation in the late 90's. We urge the Port and the City and other elected officials to establish an entity to interpret the analysis that will be forthcoming from the energy agencies in the next 6-8 months and to address the questions above.

We offer the following considerations and recommendation actions for your review.

What is our future need/energy gap?

This question is not as easy to answer as one might think and depends on a lot of variable factors and some unknowns. Almost every meeting held by SANDAG's Energy Working Group reveals new options and a more refined analysis of the regional energy calculus. Many analyses have demonstrated a generation gap of between 700 and 1100 MW by 2015. Most recently, the Energy Working Group (EWG) noted that several in-basin options were available to close the gap including one option that had no replacement power located on the Chula Vista Bayfront and one option that located 65-400 MW there.

San Diego Gas and Electric recently filed their Long Term Resource Plan (LTRP) with the California Public Utilities Commission (CPUC) for the period 2007- 2016. The LTRP estimates a load deficit for the San Diego service area of 278 MW by 2010 and only 574 MW by 2016. **This estimate assumes that the South Bay Power Plant retires and is not replaced, and that the Sunrise Powerlink is not built.**[i] Before our region commits to either a new power plant on the Chula Vista Bayfront or a new major transmission line into the region, we need to examine all the options for filling our future energy needs, and make a decision that moves our region closer to

environmental and energy security. Once we know the size of the gap and the type of energy generation we need, we can knowledgably examine the options.

What are the options for meeting (or reducing) the need?

In examining options, EHC urges all decision-makers and those responsible for energy planning for the region to pursue alternatives that:

1. prioritize in-basin generation (gas and renewable) over imported generation,
2. maximize energy efficiency and demand response, and
3. pursue localized transmission upgrades rather than new massive power lines

As a region, we should seek in-basin solution first, before accruing massive commitments that export money and jobs and move us further away from a secure and environmentally sound energy future. Below are some of the options under each of these categories that should be explored under this step.

1. Prioritize In-Basin Generation (Gas/renewable) over imported generation

Gas-Fired Generation Considerations

Baseload vs. Peakers: We need to evaluate how many new baseload plants are needed and where they would be best located. Also, since the peak drives a lot of the construction demands, peakers, in proper locations, should be developed as part of the mix. These are cheaper to build than large baseload plants and can be used only when needed. In their 2007-2016 LTRP, SDG&E identifies peaker plants as a means to meet demand through 2010, and that this would "allow for a planned retirement of older generating units in the service area".[ii] While peaker plants are less efficient than base load plants, they run infrequently to meet temporary peaks in energy demand that generally occur on hot summer afternoons. They can be more economical to build and run, and produce lower overall air emissions than a base load plant. The LTRP states that new "peaking facilities are expected to run at low capacity factors".[iii]

The location of any gas-fired solutions' impact on community health: Where plants are located is critically important to air quality and the health of local residents. The location and size of the gas-fired generation may have a significant impact. A recent article in the Voice of San Diego revealed that western Chula Vista has two of the three zip codes in the top ten of polluted zip codes for **both** toxic and criteria pollutants.[iv] Part of what we need to evaluate is the area of air pollution impacts for all gas-fired options.

Decision-makers should challenge the apparent assumption that a new 24-hour a day 'all natural gas' powered 500MW base-load replacement plant on the bay is necessary to remove the RMR from the current plant. The current plant is considered necessary for meeting peak demand when power is urgently needed for grid stability and only runs it generators part-time. The function of the current plant is completely different from the one proposed to replace it, and should require a separate evaluation of need. It is important to note that the current plant (over the past 5 years) has operated under 300MW over 78% of the time.[v] Even more recently, SDGE's LTRP noted that RMR contracts would be phased out over 2007 and 2008. We need to understand the impacts of that phase-out as part of our decision.

The impact of gas-fired solutions on reliability: With a priority on in-basin solutions, the best options for reliability may militate toward several smaller power plants strategically located rather closing the gap with one large baseload plant. It was acknowledged that there were several options for closing this gap. At an October meeting, an ISO representative advised that multiple peakers were a more prudent route to go to close this gap than a large combine cycle plant. Further, with two new baseload plants going on-line, the Resource Subcommittee noted that the local mix may benefit more from peakers and intermediate plants than additional large baseload plants. Further, the peakers described in the SDGE RFO for peaker plants near substations and on their land seems to indicate that what the region needs for reliability is not another new baseload power plant, but several peakers strategically located.

Some Options for Meeting Gap:

ENPEX Miramar Community Power Project	*350-750 MW*
Additional peakers capacity at Encina	*300 MW*
MMC peaker expansion in appropriate location	*49-300 MW*
Smaller South Bay Power Plant replacement	*120-400 MW*

In-Basin Renewable generation considerations: One allegation put forward by SDGE for Sunrise Powerlink, is that it is necessary to bring renewable energy from Imperial County and meet our Renewable Energy Portfolio Standards. However, this is not our only option. There are also options for significant in-basin renewable energy capacity that should be developed first. The SANDAG Board of Directors' recommendations to SDG&E on their Long-term Procurement Plan (September 8, 2006) asked that SDG&E meet the goal for 50% in-basin renewables that was set in the San Diego Regional Energy Strategy. SDG&E's emphasis in their LTRP on bringing in renewables over the Sunrise Powerlink is inconsistent with this goal.

EHC has commissioned a report from Local Power to assess greener energy options. This analysis will be available soon and could provide between 350 and 630MW or greener, less-polluting and cost-effective renewable energy options that would meet RMR scheduleability requirements and would be cost-effective to pursue.

Some Options for Meeting Gap:

Aggressive Photovoltaic Program (2 MW year)	*15 MW*
in addition to CSI targets	
South County Wind Farm with Pumped Storage back-up	*325 MW*
Solar Concentrator in with gas-fired back-up and cogen	*160 MW*

2. Maximize Energy Efficiency and Demand Response

Energy efficiency (EE), demand response and DG can be turned into a peaking resource if the load that is made more efficient matches the peak period. For example, if the peak load occurs during weekly daytime use, office lighting and workplace programs could be the priority. If the peak is the evening or weekend summer load, then a focus on air-conditioning will yield greatest results. South Bay should analyze which peak reductions strategies best serve our areas and implement programs.

As part of the City's commitment to sign on to the Conference of Mayors Statement on Global Climate Change, the Gas Technology Institute (GTI) was requested to produce an analysis of policies for building construction for the City of Chula Vista. Building efficiency standards could have a significant position impact on our local energy demand. Such policies could accomplish two important goals:

- Reduce future demand in general and especially on the peak
- Promote a demand, and therefore a market, for green technologies that would grow a local Green Energy Economy

This report should be evaluated as part of a South Bay strategy.

Some Options for Meeting Gap:

Advanced Metering contributions	*250MW?*
Unrealized Energy Efficiency (example CV)	
New building and retrofit requirements to generate building peak-load	

3. Pursue Localized Transmission Upgrades

Decision-makers should evaluate localized alternatives to a large multi-billion dollar transmission alternative such as the Sunrise Powerlink ($5 billion price tag including financing). Shorter and less intrusive local upgrades, such as an enhancement of a

south of SONGS line, could make a significant improvement to our regional energy grid at far less cost and impact. In the City of San Francisco Action Plan, many local inefficiencies in the local grid were identified and targeted successfully for early action.

Some options for impacting generation gap:

- *South of Songs: a small transmission line for SONGS to the San Diego grid could add 400MW to the regional demand calculus*
- *Green Path North (not as part of Sunrise)*
- *Maximize use of existing transmission lines. In presentations and in its application, SDGE has stated that they could utilize existing capacity on the Southwest Powerlink (SWPL) to import 300 MW of renewable energy from Imperial County.*

What is the best option?

Once the credible options are known, then we can determine what the best solution is and the best location for them. For example, many agree that some amount of gas-fired in-basin generation must be developed, but there are many options about where and how large it should be. Analysis may show that 500 MW of gas fired generation to meet peak is needed, but it could be concentrated in one plant or in two smaller plants located in differing areas of the demand center. Part of this consideration must include the measures that will guarantee that the RMR or any comparable designation be removed from the current SBPP. Of course, the environmental, particularly air quality, impacts on downwind communities must be part of this analysis. If our goal is to take action to remove RMR from the current power plant, then we should know all the scenarios by which that could happen.

Last, the region should commit to a solution that follows the Loading Order adopted by the California Energy Commission. The Loading Order commits to pursuing energy projects in the following order: Energy conservation, clean renewable energy; demand response; gas-fired generation; and, transmission.

How can we implement the best option?

Knowing what we want, and making it happen may be two different things. EHC proposes the creation of South Bay Sustainable Energy Action Plan (SEAP) by a stakeholder group that will articulate what the region will support and pursue. It could be modeled on the San Francisco Energy Plan which secured shut-down of a large old polluting power plant there. It will also for the basis for securing financing and to developer partnership with energy developers as needed. There are several financing mechanisms that South Bay communities, with Chula Vista in the lead, could establish.

The three South Bay cities, District 1 of the County, the Port District, the Navy, and tribal governments all have great potential to be partners in a South Bay Sustainable Energy Plan.

One example is Community Choice Aggregation (CCA). Community Choice is an established, successful method of procuring competitively priced energy services and is a viable option for funding an Action Plan. It has many advantages not least of which is that it facilitates local control over energy resource planning. Public contributions to financing of large scale generation projects can have significant advantages and could be an important option in the tool box of implementing a Sustainable Energy Action Plan. The City of Chula Vista is far long this road and needs, at this point, to update the financial analysis for the CCA which could be done at minimal cost in three months.

There are many other sources of funding to implement a Sustainable Energy Action Plan such as the California Solar Initiative, PGC Energy Efficiency Funds, Federal Energy Tax Credits, H-bond funding, Supplemental Energy Payments, that the City and Port could access alone or with other strategic partners.

Requested Actions:

EHC requests that the City and the Port pursue the following actions:

1. The Port should not proceed with any Lease-Option until additional information is available from the CEC Staff Assessment of the SBRP and the CPUC alternatives analysis is available regarding in-base alternatives to the Sunrise Powerlink, the implications of the phase-out of RMR by 2008, the GTI analysis of energy efficiency, and other key information and decision-makers have the benefit of that analysis.

2. The Port and City should request that the CEC fully analyze the impacts of a smaller replacement power plant as part of the Staff Assessment both located on the Bayfront and in a different location.

3. City and Port staff should be directed to provide additional information on the following subjects:

- A description of the multiple scenarios by which the RMR status could be removed from the current SBPP on or around 2009.
- Direct staff to include, as part of the Bayfront Master Plan Programmatic EIR alternatives to a power plant on the southern site of the Otay District as part of the final EIR.

- One major development is that SDGE is going to announce another RFO for up to 1000 MW of new capacity. We understand that the RFO will come out in mid-Feb. The Port and City should see how any LS project application fares in the competitive process and the before taking any major steps. It is expected that the RFO will favor peakers.

4. The City direct staff to update the CCA financial analysis in the next three months.

5. A South Bay energy sustainability task force or other entity comprised of South Bay elected officials and stakeholders should be convened to address the issues raised in this paper. The objectives of the SBEST should include:

A. Develop a South Bay Sustainable Energy Action Plan that includes recommendations for energy decision-makers that reflect the best interests of South Bay communities and that support the loading order, eliminate impacts on communities, and are equitable.

B. Review and provide analysis of key documents to decision-making bodies in the South Bay.

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[i] San Diego Gas and Electric. 20017-2016 Long-term Procurement Plan. Filed with the California Public Utilities Commission, Docket R.06-02-013. Exhibit IV-10. SDG&E Service Area Base Need.

[ii] Ibid. Page 4.

[iii] Ibid. Page 174

[iv] http://www.voiceofsandiego.org/articles/2007/01/02/news/01pollution.txt

[v] Based on 2001-2005 hourly load data from the CA Energy Commission obtained through EPA Clean Air Markets Emission Reporting System